



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,506	07/18/2000	Ian J. Forster	4579-048	8845

27820 7590 07/08/2002

WITHROW & TERRANOVA, P.L.L.C.
P.O. BOX 1287
CARY, NC 27512

EXAMINER

LEE, BENJAMIN C

ART UNIT	PAPER NUMBER
----------	--------------

2632

DATE MAILED: 07/08/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,506

Applicant(s)

FORSTER ET AL.

Examiner

Benjamin C. Lee

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13, 23-34, 40, 43, 47 and 57-63 is/are rejected.
- 7) ☒ Claim(s) 8-12, 14-22, 35-39, 41, 42, 44-46, 48-56 and 64-73 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 43 can not depend on itself; therefore, "claim 43" in line 1 should have read --claim 42-- to correct such deficiency and to provide antecedent basis for "said external device" of line 1.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 23-32 and 57-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. (US pat. #5,854,994).

1) In considering claims 1-3, Canada et al. disclosed all of the following claimed subject matter:

a) claimed device (Fig. 2) that magnetically attaches (col. 11, lines 4-14) to an article (machine to be monitored), comprising: a wireless communication device (Fig. 3), and a magnetic means having a magnetic force that attaches said magnetic means to the magnetic surface portion of the article when in close proximity to the magnetic surface portion of the article (inherent from col. 11, lines 13-14; col. 5, line 39 and Fig. 2);

except:

b) specifying that the magnetic means is a magnet, an electromagnet comprised of a coil around a magnetic surface portion and said wireless communication device provides a voltage across said coil.

However, since Canada et al. teaches that the attachment means 404 in Fig. 2 can be a "magnetic mount", it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that such magnetic mount can be implemented as a mounting via magnetic force such as a conventional permanent magnet or conventional electromagnet such as a coil having a ferrous core and powered by an applied voltage across the coil (coil around a magnetic surface portion) , whereby the choice of using either one would have constituted functional equivalents. Furthermore, even though Canada et al. teaches that the magnetic mount is "self-contained" to facilitate mounting even in cramped locations (col. 5, lines 38-43), it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that when the magnetic means is implemented with an electromagnet, the magnetic mount need not be self-contained while still would allow mounting even in cramped locations if its power is supplied from the power source of the wireless communication device.

2) In considering claims 4-5, Canada et al. made obvious all of the claimed subject matter as in claim 3, including:

a) claimed said voltage is generated by a battery (col. 7, lines 42-52);

except:

b) the claimed said voltage is generated by a reservoir capacitor.

However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that other known alternative voltage source to a battery in a device such as

Art Unit: 2632

taught by Canada et al., such as a known reservoir capacitor, can be used as without unexpected results, the choice being depended on the particular voltage and current characteristics provided by the particular power source versus those of the device requirements.

3) In considering claim 23, Canada et al. made obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed said wireless communication device contains a non-magnetic force in addition to said magnetic force to aid the attaching of said wireless communication device to the magnetic surface portion.

However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a redundant or supplemental attachment means, such as an adhesive, can be further used to attach the wireless communication device to the magnetic surface portion in the invention of Canada et al. to ensure that the two remain coupled/attached.

4) In considering claim 24, Canada et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed at least one tab connected to said wireless communication device (Fig. 2).

5) In considering claims 25-26, Canada et al. made obvious all of the claimed subject matter as in claim 24, plus the consideration of claim 1 regarding the permanent magnet and electromagnet.

6) In considering claim 27, Canada et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed said magnetic surface portion is a conductive material (inherent from col. 5, lines 36-43).

7) In considering claim 28, Canada et al. made obvious all of the claimed subject matter as in the consideration of claim 1, including:

--the claimed identification of the article is met by col. 11, lines 4-14 whereby identification of a specific device which is mounted to a specific article out of a plurality of articles also identifies the specific article.

8) In considering claims 29-32, Canada et al. made obvious all of the claimed subject matter as in claim 28, plus the consideration of claims 2-5 above.

9) In considering claims 57-61, Canada et al. made obvious all of the claimed subject matter as in claim 28, plus the consideration of claims 23-27 above.

4. Claims 6 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. in view of Riceman et al. (US pat. #5,611,120).

1) In considering claim 6, Canada et al. made obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed said magnet is located inside a chamber.

In the same magnetic attachment art, Riceman et al. teaches a magnetic latch with improved latching force using a magnet (230) located inside a chamber (formed by film 319 in Fig. 10, or 200 in Fig. 1). In view of the teachings by Canada et al. and Riceman et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a specific, known magnetic attachment means such as taught by Riceman et al. can be used to implement the magnetic attachment means in a device such as taught by Canada et al. for its improved latching characteristics.

Art Unit: 2632

2) In considering claim 33, Canada et al. made obvious all of the claimed subject matter as in claim 28, plus the consideration of claim 6 in view of Riceman et al. above.

5. Claims 6-7, 13, 33-34, 40, 47 and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada et al. in view of Thomson et al.(US pat. #4,754,532).

1) In considering claims 6-7, Canada et al. made obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed said magnet is located inside a chamber, wherein said magnet moves in said chamber in a place substantially perpendicular to the magnetic surface portion.

In the same magnetic attachment art, Thomson et al. teaches the known use of magnetic and electromagnetic latches (col. 1, lines 18-20), and further a magnetic holding assembly (Fig. 3) that provides adjustment to the amount of magnetic coupling to the attachment surface, whereby a magnet (36) moves in a chamber in a place substantially perpendicular to the magnetic surface portion (12). In view of the teachings by Canada et al. and Thomson et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a specific, known magnetic attachment means such as taught by Thomson et al. can be used to implement the magnetic attachment means in a device such as taught by Canada et al. for its magnetic coupling force adjustability characteristics which inherently constitutes a way for attaching and decoupling the device to the mounting surface.

2) In considering claim 13, Canada et al. and Thomson et al. made obvious all of the claimed subject matter as in claim 6, wherein:

--the claimed said chamber has an open portion for an external device to be inserted inside said chamber proximate to said magnet is met by Fig. 3 of Thomason et al. whereby the

Art Unit: 2632

spacing in the chamber between housing portion 31 and magnet 36 allows for an external device of the appropriate size to be inserted therein proximate the magnet when housing portion 33 is first unscrewed off.

3) In considering claims 33-34, Canada et al. made obvious all of the claimed subject matter as in claim 28, plus the consideration of claims 6-7 in view of Thomson et al. above.

4) In considering claim 40, Canada et al. and Thomson et al. made obvious all of the claimed subject matter as in claim 33, plus the consideration of claim 13 above.

5) In considering claim 47, Canada et al. made obvious all of the claimed subject matter as in claim 28, plus the consideration of claim 7 in view of Thomson et al. above, wherein:

--the claimed wherein said magnet is housed and rotates in a magnetic assembly is met by Fig. 3 of Thomson et al. in which the magnetic rotates when knob 33 is rotated.

6) In considering claims 62-63, Canada et al. made obvious all of the claimed subject matter as in the consideration of claim 7 in view of Thomson et al. above.

Allowable Subject Matter

6. Claims 8-12, 14-22, 35-39, 41-42, 44-46, 48-56 and 64-73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 43 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Moran et al., US pat. #6,005,482

--A similar surface mounted information collage using magnetically mounted radio frequency electronic tags (col. 1, lines 14-23 & 40-65, and col. 5, lines 30-53).

2) Cawthorne, US pat. #5,633,626

--A known use of electromagnet to cancel magnetic fields of a permanent magnet by remote initiation of a control signal.

3) Warrow, US pat. #5,142,497

--A similar adjustment of magnetic attraction of a magnetic latch (Figs. 15-19).

4) Bauer, US pat. #5,937,487

--A similar magnetic slide fastener having additional, non-magnetic fastener means.

5) Mars, US pat. #5,732,451

--A similar magnetically attached name tag that identifies the wearer.

6) Whittington, US pat. #5,347,733

--Another similar magnetically attached name tag that identifies the wearer.

7) Brady et al., US pat. #6,100,804

--A known use of a wireless transceiver as a name tag for identifying the wearer (Fig. 20 and col. 16, lines 57-67).

8) Oliwa et al., US pat. #4,856,088

--A similar magnetically attachable wireless communication device (Figs. 1-3).

9) Harris et al., US pat. #5,584,070

--Another similar magnetically attachable wireless communication device (Figs. 1-3 and col. 5, lines 47-49).

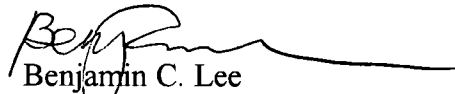
10) Pace, II, US pat. #5,712,899

--A known use of magnetically mounting a GPS receiver antenna to a magnetic surface (metallic) on a car's exterior (Fig. 14).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (703)305-0412. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A. Hofsass can be reached on (703) 305-4717. The fax phone numbers for the organization is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8576.


Benjamin C. Lee
Primary Examiner
Art Unit 2632

B.L.
June 29, 2002